

## **Edwards County**

## Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/26/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 14 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Edwards County economy.<sup>1</sup>

These 14 sectors have a total direct output of approximately \$332.8 million and support 527 jobs in Edwards County. Running the model for all 14 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Edwards County Economy							
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>		
Direct Effect	527.4	30.64%	\$43,333,067	36.35%	\$332,762,433		
Indirect Effect	171.4	9.96%	\$8,039,961	6.74%	\$28,078,191		
Induced Effect	97.8	5.68%	\$3,186,608	2.67%	\$12,873,340		
Total Effect	796.6	46.29%	\$54,559,636	45.77%	\$373,713,965		

As shown in the above table, agriculture, food, and food processing sectors support **797 jobs**, or **46.29%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 14 agriculture, food, and food processing sectors is approximately \$54.6 million, or 45.77% of the GRP.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **154 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Edwards County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	153.7	\$33,667,493		
Grain farming	148.3	\$93,693,321		
Support activities for agriculture and forestry	102.0	\$5,478,699		
Wholesale trade	79.2	\$16,403,864		
Animal, except poultry, slaughtering	53.0	\$35,196,284		
Soybean and other oilseed processing	29.5	\$135,387,270		
Real estate	14.3	\$956,899		
Oilseed farming	14.0	\$24,136,930		
Hospitals	12.6	\$1,922,160		
Marketing research and all other miscellaneous professional, scientific, and technical services	11.5	\$340,308		

The soybean and other oilseed processing sector directly contributes approximately \$135.4 million to the Edwards County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Soybean and other oilseed processing	29.5	\$135,387,270		
Grain farming	148.3	\$93,693,321		
Animal, except poultry, slaughtering	53.0	\$35,196,284		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	153.7	\$33,667,493		
Oilseed farming	14.0	\$24,136,930		
Wholesale trade	79.2	\$16,403,864		
Support activities for agriculture and forestry	102.0	\$5,478,699		
Owner-occupied dwellings	0.0	\$3,386,388		
Dairy cattle and milk production	8.7	\$3,062,465		
Monetary authorities and depository credit intermediation	11.2	\$2,061,408		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Edwards County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	14.0	\$24,136,930.47		
Grain farming	148.3	\$93,693,321.23		
Vegetable and melon farming	0.7	\$120,012.36		
Greenhouse, nursery, and floriculture production	3.0	\$337,561.13		
All other crop farming	9.1	\$1,190,384.15		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	153.7	\$33,667,491.91		
Dairy cattle and milk production	8.7	\$3,062,465.43		
Poultry and egg production	0.0	\$9,041.81		
Animal production, except cattle and poultry and eggs	0.2	\$40,072.66		
Support activities for agriculture and forestry	102.0	\$5,478,698.73		
Soybean and other oilseed processing	29.5	\$135,387,268.07		
Animal, except poultry, slaughtering	53.0	\$35,196,285.25		
Bread and bakery product, except frozen, manufacturing	1.7	\$190,897.02		
Landscape and horticultural services	3.5	\$252,002.15		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Edwards County, the retail sector was omitted.